AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A nuclear magnetic resonance spectrometer for liquid-solution which comprises a superconductive magnet including paired split magnets for generating a magnetic field in a horizontal direction, a low temperature container for cooling said superconductive magnet, said low temperature container having a first space perpendicular to a horizontal magnetic field generated by said superconductive magnet and a second space along said horizontal magnetic field generated by said superconductive magnet, a high-frequency transmission coil and a reception coil and in which a sample such as protein dissolved in a liquid-solution is charged in a sample tube of a diameter of 5 to 10 mm ~~and is inserted substantially vertically~~, wherein a stationary magnetic field generated by said superconductive magnet is 11 T or more, the direction of the stationary magnetic field generated by said superconductive magnet is in the horizontal direction, a change ~~per hour~~ of proton nuclear magnetic resonance frequency due to a change of said stationary magnetic field is 1.0 ~~Hz~~ Hz/hour or less, the uniformity of said stationary magnetic field in a sample space is 1.0 Hz or less in terms of proton nuclear magnetic resonance frequency, said liquid-solution sample is inserted in the magnetic field center ~~substantially vertically~~ from above said first space, and said reception coil is a solenoid coil inserted in the magnetic field center from below the spectrometer.

2. (Currently Amended) A nuclear magnetic resonance spectrometer for liquid-solution which comprises a superconductive magnet including paired split magnets for generating a magnetic field in a horizontal direction, a low temperature container for cooling

said superconductive magnet, said low temperature container having a first space perpendicular to a horizontal magnetic field generated by said superconductive magnet and a second space along said horizontal magnetic field generated by said superconductive magnet, a high-frequency transmission coil and a reception coil and in which a sample such as protein dissolved in a liquid-solution is charged in a sample tube of a diameter of 5 to 10 mm ~~and is inserted substantially vertically~~, wherein a stationary magnetic field generated by said superconductive magnet is 11 T or more, the direction of the stationary magnetic field generated by said superconductive magnet is in the horizontal direction, a change ~~per hour~~ of proton nuclear magnetic resonance frequency due to a change of said stationary magnetic field is 1.0 ~~Hz~~ Hz/hour or less, the uniformity of said stationary magnetic field in a sample space is 1.0 Hz or less in terms of proton nuclear magnetic resonance frequency, said liquid-solution sample is inserted ~~substantially vertically from above in the magnetic field center~~ in the magnetic field center from above said first space, and said reception coil is a solenoid coil made of a superconductive material, inserted in the magnetic field center from below the spectrometer and cooled to a superconductivity revealing temperature or less.

3. (Previously Presented) A nuclear magnetic resonance spectrometer for liquid-solution according to claim 1, wherein said sample is a polymer organic compound, protein or ligand.

4. (Previously Presented) A nuclear magnetic resonance spectrometer for liquid-solution according to claim 2, wherein said sample is a polymer organic compound, protein or ligand.

Claims 5 and 6 (Cancelled)

7. (Original) A nuclear magnetic resonance spectrometer for liquid-solution according to claim 1, wherein said superconductive magnet includes a toroidal magnet placed horizontally.

8. (Original) A nuclear magnetic resonance spectrometer for liquid-solution according to claim 2, wherein said superconductive magnet includes a toroidal magnet placed horizontally.

9. (Currently Amended) A nuclear magnetic resonance spectrometer for liquid-solution which comprises a superconductive magnet, a low temperature container for cooling said superconductive magnet, said low temperature container having a first space perpendicular to a horizontal magnetic field generated by said superconductive magnet and a second space along said horizontal magnetic field generated by said superconductive magnet, a high-frequency transmission coil and a reception coil and in which a sample such as protein dissolved in a liquid-solution is charged in a sample tube of a diameter of 5 to 10 mm ~~and is inserted substantially vertically from above~~, wherein a stationary magnetic field generated by said superconductive magnet is 11 T or more, said superconductive magnet is a toroidal magnet placed in a horizontal direction including paired split magnets for generating a magnetic field in the horizontal direction, a change ~~per hour~~ of proton nuclear magnetic resonance frequency due to a change of said stationary magnetic field is 1.0 ~~Hz~~

Hz/hour or less, the magnetic field uniformity in a sample space is 1.0 Hz or less in terms of proton nuclear magnetic resonance frequency, a plurality of liquid-solution samples are placed circumferentially of the toroidal coil at intervals of substantially equidistance, and the reception coil corresponding to each sample is a solenoid coil made of a superconductive material, inserted in the center of said magnetic field from below the spectrometer and cooled to a superconductivity revealing temperature or less said liquid-solution samples are inserted in the magnetic field center from above said first space.

10. (Original) A nuclear magnetic resonance spectrometer for liquid-solution according to claim 9, wherein said superconductive magnet is a toroidal magnet placed horizontally and in order to discriminate nuclear magnetic resonance signals generated from adjacent plural samples from each other, the magnetic field intensity applied to the individual samples is regulated.

Claim 11 (Cancelled)